CHAPTER 4. SPECTRUM MANAGEMENT EVALUATION CRITERIA

400. GENERAL. This chapter provides the evaluation criteria to measure the field level spectrum management function effectiveness.

401. CRITERIA. The spectrum management field function evaluations shall be conducted in accordance with the latest edition of Order 1800.14, Airway Facilities Evaluation Program.

402. SUBJECTS OF EVALUATION. The FAA spectrum management field level office performance shall be measured against the following general evaluation items extracted from Order 1800.14 and additional specific evaluation items developed by ASR.

a. Compliance With Standards and Guidelines. Spectrum management field personnel shall be familiar with and strictly apply as required, ITU, ICAO, FCC, NTIA and FAA published regulations governing frequency matters.

b. Efficiency and Economy.

(1) Personnel functions shall be defined by workload description statements, which accurately define the work performed by the FMO, that accompany the generic position descriptions.

(2) Cross-training shall be accomplished to provide essential coverage of specialized areas.

(3) Economy of personnel and material shall be pursued actively in all operational phases.

c. Spectrum Engineering.

(1) Frequencies shall be engineered properly (prior to formal assignment) with respect to radiation, propagation, emission and power factors, including engineering consideration of protection from potential interference.

(2) The FMO shall be the focal point and provide guidance and expertise in frequency matters to all regional elements.

(3) Guidance shall be provided to the region's planning elements in advance of programming actions concerning the spectrum bands to be used, radiated power and emission characteristics of the new facilities and any limitations which appear because of legal or technical restrictions.

(4) Timely spectrum engineering guidance shall be provided to non-Federal entities, other Federal agencies and DOD elements desiring to establish aeronautical systems communications, control or navigation facilities.

(5) Regional radiating systems shall be evaluated periodically for compliance with

emission and performance standards with deviations and recommendations reported for correction.

(6) The FMO will coordinate with DOD organizations within their regions as necessary, to ensure that electromagnetic countermeasures activity does not impact the NAS.

(7) Airspace cases will be analyzed in such a manner as to ensure that non-Federal users do not cause interference to critical aeronautical facilities.

(8) The FMO shall conduct electromagnetic compatibility studies, as necessary, to determine the effect of proposed systems on current aeronautical systems.

(9) The FMO should participate in the site selection and installation planning for all new NAS facilities and systems.

(10) The FMO should visit regional centers and TRACON's on a quarterly basis in order to review requirements for radio spectrum to support CNS systems.

d. Interference resolution.

(1) Frequency interference problems to the NAS aeronautical systems from any source shall receive priority attention and be corrected in minimum time.

(2) Close working relationships shall be established with other agency elements in Airway Facilities (AF), Air Traffic (AT), Flight Standards (FS), Airports, local FCC and DOD frequency personnel to assure rapid correction of interference problems.

(3) Every effort shall be made to terminate or correct an interfering device in lieu of a frequency change to solve a problem.

(4) Engineering reports shall be prepared, describing problems, their resolution and recommendations regarding action to be taken to preclude recurrence. Copies shall be furnished to all entities involved and ASR.

(5) FMO offices shall have operable mobile and portable electronic interference detection equipment in addition to an RFIM van. Critical equipment shall be calibrated on a scheduled basis.

(6) One or more of the FMO staff shall be trained thoroughly in operation of the interference detection and direction-finding equipment operation.

(7) When tasked by ASR, designated Technical Center engineers are able to assist FMO's in the resolution of RFI problems which cannot be resolved at the regional level.

e. Frequency assignment records.

(1) Regional copies of the Government Master File (GMF) and other IRAC frequency lists shall be kept current. The FMO shall provide for prompt verification of updated publications to assure accurate and complete regional entries.

(2) The automated data base for cochannel, adjacent channel and cosite engineering reference shall be kept current to permit rapid cochannel and adjacent-channel engineering references.

(3) Frequency utilization shall be reviewed annually with followup actions taken.

(4) Transmitter frequency authorizations for fixed, base, and mobile transmitters shall be issued and followup action taken to assure proper posting and currency.

(5) Mobile and portable frequency and call sign assignments shall be maintained in a current and readily available status.

(6) Procedures shall be established that use the available automated capabilities to determine quickly the status of all frequency assignment actions.

(7) Filing procedures shall be established to assure rapid retrieval of correspondence and record information. They shall include assurance that exempt records are not destroyed.

f. Planning.

(1) Arrangements shall be made to assure that FMO's receive information regarding frequency requirements for new facilities as soon as known, to assure the availability of frequencies.

(2) FMO staff members shall maintain awareness of new developments and new applications of existing techniques to provide current engineering information to planning offices.

(3) Frequency assignment shall be obtained in time to enable installation personnel to order necessary crystals, filters, etc., for new or changed facilities.

(4) Facility commissioning dates and change schedules shall be maintained to assure knowledge of current status.

g. Coordination.

(1) Channels of communication shall be established and maintained with appropriate military representatives and offices, FCC district and monitoring offices, other Federal spectrum users, interference resolution organizations and representatives of non-Federal aviation industry spectrum users.

(2) Other FAA entities, such as AT, FS, Non-Fed Coordinator and Emergency Readiness (ER), shall be apprised of FMO functions, communications and equipment capabilities, and encouraged to provide advice on frequency matters and the need for entities to report

interference problems promptly.

(3) Coordination requirements for frequency matters in ITU, IRAC, ICAO and FCC regulations and procedures shall be adhered to.

(4) Procedures shall be established and maintained to assure close coordination with adjacent regions.

h. Radiation Hazard Survey. The FMO is the single point-of-contact at the region for performing radiation hazard measurements, both ionizing and non-ionizing, and is responsible for the definitive measurements of radiation levels.

(1) FAA field activities shall contact their FMO or ASR to address any consideration of radiation hazard measurements.

(2) Only FMO's, ASR staff or technical support provided or supported by ASR, shall make radiation hazard measurements on FAA equipment.

(3) FAA Engineering and Environmental Safety Division, ANS-500, has overall program management responsibility for environmental hazards, including radiation hazards.

(4) In addition, the following functions are assigned to FMO's in Order 3910.3:

(a) Coordinate and consult with the Industrial Hygiene Program Manager in providing advice and information on matters pertaining to radiation health hazards in FAA operations.

(b) Coordinate with the Industrial Hygiene Program Manager, the Industrial Investigations Program Manager and the Safety and Health Managers in responding promptly to reports of radiation health hazards.

(c) Perform radiation health hazards surveys on new and modified facilities that house equipment, systems or substances capable of producing external ionizing or non-ionizing radiation fields — and others as required.

403. thru 499. RESERVED.